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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,045	10/19/2006	Edward J. Sare	07811.0021	7579

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EXAMINER	
FAISON GEE, VERONICA FAYE	
ART UNIT	PAPER NUMBER
1793	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,045	SARE ET AL.	
	Examiner	Art Unit	
	VERONICA FAISON GEE	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 13-53* is/are pending in the application.

4a) Of the above claim(s) *11,12 and 54-58* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 13-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 11, 12 and 54-58 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7-31-09.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golley et al.

Golley teaches kaolin clay pigments wherein the posses a combination of optical and physical properties, such as brightness, printability, and transfer efficiency, not previously seen in existing commercial products. The reference further teaches that the kaolin clay pigment are useful, e.g., in paper filler and coating compositions, ink compositions, and printing applications, especially rotogravure printing (abstract, 0054). Typical applications include the printing seen on packaging materials and in color magazines. In rotogravure printing, the image to be printed is etched into the surface of a printing apparatus, typically a metal roll or sheet ink is applied to the surface of the

apparatus, filling holes or cells that comprise the etched image. Printing occurs when the surface to be printed (paper or plastic, for instance) directly contacts the printing apparatus (0004). The present invention encompasses these pigments, compositions comprising them, and any application in which they are used. Such compositions include, but are not limited to, paper filler, paper coating, and ink compositions. In particular, coating, filler, and ink formulations comprising the inventive pigments may advantageously be used in gravure and rotogravure printing. When used in ink formulations and as paper filler and coatings, the kaolin pigments of the present invention impart good printability and ink transfer efficiency. (0016). The reference discloses that the kaolin pigments may also optionally exhibit a Steepness (d.30/d. 70x100) of at least about 30, the value of which changes with embodiments to at least about 35, at least about 40, at least about 45, and at least about 50; and/or have a particle size distribution (e.s.d. as determined by Sedigraph) satisfying the following ratio:

$$\frac{\%\ \text{finer than}\ 2.0\mu m}{\%\ \text{finer than}\ 0.5\mu m} \geq \text{about}\ 3.$$

(0044).

The reference remain silent to the ratio set forth in claim 1, however the inverse of the ratio would give a ratio of greater than 0.33 (which would overlap with the claimed ratio of less than or equal to 0.5. The reference discloses a process wherein the crude feed kaolin clay is first blunged and that any suitable kaolin feed capable of providing a product having the stated properties may serve as the crude feed. Blunging mixes the crude feed clay with water in a high-energy mixer. Golley et al also disclose that a

dispersing agent may be added during blunging to aid in forming the aqueous suspension. After blunging, the rude suspension may be fractionated as necessary into fine and coarse fractions. Fractionation (or classification) may be accomplished using any known or after-discovered method. Appropriate methods include gravity sedimentation or elutriation, any type of hydrocyclone apparatus, or, preferably, a solid bowl decanter centrifuge, disc nozzle centrifuge, or the like. The fine fraction, once separate, can be used in the production of other commercial products (0056-0061). The ink compositions of the present invention comprise may comprise the kaolin clay pigments and an ink base, and may be formulated for any desired use including, but not limited to, gravure and rotogravure printing. The inventive pigments may be used alone or together with other pigments (0068). The kaolin pigments of the present invention may also be used as paper fillers and coatings. A filler composition may comprise from about 1% to about 35% of the inventive pigment (0069).

Therefore it would have been obvious to one of ordinary skill in the art that ratio set forth in claim 1, however the inverse of the ratio would give a ratio of greater than 0.33 (which would overlap with the claimed ratio of less than or equal to 0.5), absence tangible evidence to the contrary.

Claims 13-23 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golley et al (US 2003/0164117) as applied to claims above, and further in view of Pavlin et al (US Patent 4,711,927)

Golley et al is described above, but fails to specific products made with the kaolin.

Pavlin et al teach an aqueous ink composition comprising a colorant, a resin binder and a solvating proportion of water (abstract, col. 1 lines 24-35), The reference further teaches that the colorant may be pigments such as zinc oxide and titanium oxides (col. 1 lines 49-59). The reference further teaches that the resin binder in present in the amount of about 1 to about 40% by weight (col. 2 lines 9-16). A variety of alcohols may be present in the composition including methanol, ethanol, propanol, ethylene glycol, hydroxyl-terminated poly(ethyleneoxide), glycerol and the like (col. 6 lines 45-50). The composition may further comprise additives commonly found in aqueous ink composition such as surfactants, defoamers, pigment extenders such as clays and pigment dispersing aids such as sodium hexametaphosphate or co-solvents like water miscible glycols and other high boiling water-miscible solvents to regulate ink film drying rates (col. 6 lines 58-66). The reference remains silent to the specific components, i.e. biocides and drying accelerating agents. These components are well known in the art and be would be obvious to one of ordinary skill to select the specific components to best achieve the desired properties of the composition.

Claims 24-33, 48, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golley et al (US 2003/0164117) as applied to claims above, and further in view of Sare et al (US 2002/0088376).

Golley et al is described above, but fails to specific products made with the kaolin.

Sare et al teach that calcined kaolin products are suited for use in paint or coating compositions in which any one of these characteristics are desired. They are

particularly suited for use as pigments in paint or coating compositions in which a combination of two or more of these characteristics are desired. The products of the invention may also be useful wherever kaolins are used, such as in making filled plastics, rubbers, sealants, cables, ceramic products, cementitious products, and paper products and paper coatings (0008). The reference further teaches that the paint compositions may comprise, in addition to the pigments of the invention, a polymeric binder, a primary pigment such as titanium dioxide, optionally a secondary pigment such as calcium carbonate, silica, nephaline syenite, feldspar, dolomite, diatomaceous earth, and flux-calcined diatomaceous earth. For water-based versions of such paint compositions, any water-dispersible binder, such as polyvinyl alcohol (PVA) and acrylics may be used. Paint compositions may also comprise other conventional additives, including, but not limited to, surfactants, thickeners, defoamers, wetting agents, dispersants, solvents, and coalescents (0127).

With regards to the amount of pigment present in the composition, when general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by changing the size, shape, proportion of shape, degree and sequence of added ingredients through routine experimentation. (In re Rose, 105 USPQ 137; In re Aller 220F, 2d 454, 105 USPQ 233,235 (CCPA 1955); In re Dailey et al., 149 USPQ 47; In re Reese, 129 USPQ 402; In re Gibson, 45 USPQ 230).

Claims 34-46 and 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golley et al (US 2003/0164117) as applied to claims above, and further in view of Pruett et al (US Patent 6,564,199).

Golley et al is described above, but fails to specific products made with the kaolin.

Pruett et al teach a paper coating pigment comprising kaolin (abstract). The reference further teaches the paper coating comprises a dispersing agent generally in an amount of up to 2% by weight of a polyelectrolyte. The reference also teaches a binder composition comprising starch binder may be used in conjunction with one or more other binders such as synthetic binders of the latex or polyvinyl acetate or polyvinyl alcohol type. The latex may comprise a styrene butadiene, acrylic latex, vinyl acetate latex or styrene acrylic copolymer (col. 11 lines 20-29, col. 12 lines 1-5, col. 13 lines 1-4). Pruett et al discloses that the coating composition may be applied to coat a sheet of paper and calendaring the paper to form a gloss coating (col. 12 lines 12-15). The reference discloses that it is known in the art to coat papers that are used for magazines, catalogues and for advertising and promotional material (which may be paperboard) and may be printed by offset printing (col. 1 lines 13-15, 34-36).

Response to Arguments

1. Applicant's arguments filed 2-12-10 have been fully considered but they are not persuasive.

Applicant argues that pulverized hydrous kaolins having a defined particle size distribution may exhibit higher dispersion ratio than non-pulverized kaolins.

2. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., higher dispersion ratio) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that the references does not disclose hydrous kaolin having a Hegman grind of more than about 2 in 3 minutes using "SSM"V-T alkyd Hegman Test. When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP § § 2112- 2112.02 .

Applicant argues that the rejections fail to explain how the recite subject matter not how the rejection is obvious.

The Examiner respectfully disagrees. The Examiner discloses the primary reference teaches various applications of the kaolin and that the reference does not teach a specific application (i.e paper coating with kaolin) and then describes the secondary reference that uses kaolin in paper coating wherein the kaolin is substantially the same as that in the primary reference therefore making it obvious to use in the application of the secondary reference.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERONICA FAISON GEE whose telephone number is (571)272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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